

What is claimed is:

1. A lock structure, comprising:

a first element having a guide hole and a first through hole located co-axially with the guide hole;

a second element disposed under the first element and having a second through hole aligned with the first through hole;

a guiding element rotating and movably disposed in the guide hole, wherein the guiding element has a third through hole aligned with the first through hole; and

a fixing pin inserted through the third through hole, the guide hole, the first through hole and the second through hole and having a first retaining portion, wherein the first retaining portion is formed on the lower portion of the fixing pin and located under the second element.

2. The lock structure as claimed in claim 1, wherein the guide hole is circular and formed with inner threads.

3. The lock structure as claimed in claim 2, wherein the guiding element is a hollow cylinder, and the outer surface of the guiding element is formed with outer threads that engage the inner threads of the guide hole.

1 4. The lock structure as claimed in claim 1,
2 wherein the cross sections of the first through hole,
3 second through hole and third through hole co-axially
4 aligned with the cross section of the first retaining
5 portion of the fixing pin, and the first retaining
6 portion pushes against the second element when the fixing
7 pin rotates at an angle.

1 5. The lock structure as claimed in claim 4,
2 wherein the cross sections of the first retaining
3 portion, first through hole, second through hole and
4 third through hole are rectangular.

1 6. The lock structure as claimed in claim 4,
2 wherein the cross sections of the first retaining
3 portion, first through hole, second through hole and
4 third through hole are substantially rectangular.

1 7. The lock structure as claimed in claim 1,
2 wherein the guiding element further comprises at least
3 one second retaining portion formed in the third through
4 hole.

1 8. The lock structure as claimed in claim 7,
2 wherein the fixing pin further comprises a third
3 retaining portion formed on the upper portion of the
4 fixing pin, and the second retaining portion abuts the
5 third retaining portion.

1 9. The lock structure as claimed in claim 8,
2 wherein a first groove is formed on the third retaining
3 portion.

1 10. The lock structure as claimed in claim 1,
2 wherein a second groove is formed on the guiding element.

1 11. The lock structure as claimed in claim 1,
2 wherein the height of the guiding element is smaller than
3 that of the guide hole.

1 12. A method for using a lock structure having a
2 first element, a second element, a guiding element and a
3 fixing pin, the first element having a guide hole and a
4 first through hole located under the guide hole, the
5 second element deposited under the first element and having
6 a second through hole corresponding to the first through
7 hole, the guiding element rotating and movably disposed
8 in the guide hole and having a third through hole
9 corresponding to the first through hole, the fixing pin
10 having a first retaining portion formed on the lower
11 portion of the fixing pin, comprising the steps of:

12 (a) rotating the guiding element to advance the
13 guiding element into the guide hole;

14 (b) fitting the fixing pin into the third through
15 hole, guide hole, first through hole and second
16 through hole to locate the first retaining
17 portion thereof under the second element;

18 (c) rotating the fixing pin by an angle in a first
19 direction to rotate the first retaining portion
20 thereof by the angle; and

21 (d) rotating the guiding element to move the guiding
22 element in the guide hole until the first

23 retaining portion of the fixing pin abuts the
24 second element.

1 13. The method as claimed in claim 12, further
2 comprising the steps of:

3 (e) rotating the guiding element to move the guiding
4 element downward in the guide hole and separate
5 the first retaining portion of the fixing pin
6 from the second element;

7 (f) rotating the fixing pin by an angle in a second
8 direction opposite to the first direction to
9 rotate the first retaining portion thereof by
10 the angle; and

11 (g) removing the fixing pin from the third through
12 hole, guide hole, first through hole and second
13 through hole to separate the first element from
14 the second element.

1 14. The method as claimed in claim 13, wherein the
2 guide hole is circular and formed with inner threads.

1 15. The method as claimed in claim 14, wherein the
2 guiding element is a hollow cylinder, and the outer
3 surface of the guiding element is formed with outer
4 threads engaging the inner threads of the guide hole.

1 16. The method as claimed in claim 13, wherein the
2 cross sections of the first through hole, second through
3 hole and third through hole aligns with the cross section
4 of the first retaining portion of the fixing pin.

1 17. The method as claimed in claim 16, wherein the
2 cross sections of the first retaining portion, first
3 through hole, second through hole and third through hole
4 are rectangular.

1 18. The method as claimed in claim 16, wherein the
2 cross sections of the first retaining portion, first
3 through hole, second through hole and third through hole
4 are substantially rectangular.

1 19. The method as claimed in claim 13, wherein the
2 guiding element further comprises at least one second
3 retaining portion formed in the third through hole.

1 20. The method as claimed in claim 19, wherein the
2 fixing pin further comprises a third retaining portion
3 formed on the upper portion of the fixing pin, and the
4 second retaining portion abuts the third retaining
5 portion.

1 21. The method as claimed in claim 20, wherein a
2 first groove is formed on the third retaining portion.

1 22. The method as claimed in claim 21, wherein step
2 (c) further comprises:

3 (c1) inserting a tool in the first groove of the
4 third retaining portion to turn the fixing pin.

1 23. The method as claimed in claim 21, wherein step
2 (f) further comprises:

3 (f1) inserting a tool in the first groove of the
4 third retaining portion to turn the fixing pin.

1 24. The method as claimed in claim 13, wherein a
2 second groove is formed on the guiding element.

1 25. The method as claimed in claim 24, wherein step
2 (a) further comprises:

3 (a1) inserting a tool in the second groove of the
4 guiding element to turn the guiding element.

1 26. The method as claimed in claim 24, wherein step
2 (d) further comprises:

3 (d1) inserting a tool in the second groove of the
4 guiding element to turn the guiding element.

1 27. The method as claimed in claim 24, wherein step
2 (e) further comprises:

3 (e1) inserting a tool in the second groove of the
4 guiding element to turn the guiding element.